

Ocean gales and storms, September, 1925

Vessel	Voyage		Position at time of lowest barometer		Gale began	Time of lowest barometer	Gale ended	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Highest force of wind and direction	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH ATLANTIC OCEAN													
Saxoline, Br. S. S.	England	New Orleans	57 26 N.	11 14 W.	1st	12.30 a.	1st	29.80	W	W., 8	W	W., 8	Steady.
Parthenia, Br. S. S.	Montreal	Glasgow	53 34 N.	48 31 W.	2d	4 p., 2d	3d	29.75	S	S., 9	S	S., 9	Do.
Baja California, Hond. S. S.	New Orleans	Vera Cruz and return.	22 52 N.	93 35 W.	5th	6 p., 5th	6th	29.77	N	N., 4	SE	E., 8	N.-E.-SE.
Coldbrook, Am. S. S.	do	Havre	41 27 N.	52 55 W.	5th	9 p., 5th	10 p., 5th	29.57	ENE	NE., 9	NE	NE., 9	ENE.-NE.
Conrad Mohr, Nor. S. S.	do	Marseille	37 35 N.	24 48 W.	10th	10 a., 12th	13th	29.87	SE	SE., 7	SE	—, 8	Steady.
Baron Wamyss, Br. S. S.	Quebec	Greenock	55 54 N.	33 30 W.	11th	2a., 12th	13th	29.50	NE	N., 9	WSW	N., 9	NE.-N.
Do	do	do	56 10 N.	13 27 W.	14th	5p., 15th	15th	29.32	S	Calm	NW	S., 10	S.-Calm.-SW.-NW.
Lwow, Pol. Bk.	Cadiz	Rotterdam	48 45 N.	11 35 W.	14th	7a., 14th	15th	29.42	SSE	SSE., 6	WSW	SW., 10	SSE.-WNW.
United States, Dan. S. S.	Oslo	New York	58 33 N.	17 35 W.	15th	10 a., 15th	18th	29.36	SSE	SSE., 7	W	WNW., 9	S.-W.-N.
George Washington, Nor. M. S.	do	Canal Zone	45 09 N.	12 55 W.	18th	8 p., 18th	19th	29.55	WNW	S., 9	NW	SW., 11	S.-W.-N.
Lwow, Pol. Bk.	Cadiz	Rotterdam	50 36 N.	3 00 W.	19th	6a., 19th	19th	29.26	ESE	SW	WSW	SW., 10	ESE.-S.-WSW
Munchen, Ger. S. S.	New York	Cherbourg	45 36 N.	40 19 W.	18th	Mid., 19th	23d	29.51	SW	WSW., 10	NNW	WNW., 11	SW.-W.
Paris, Fr. S. S.	Havre	New York	48 10 N.	43 45 W.	19th	2a., 20th	11 a., 20th	29.25	S	W., 10	WNW	W., 11	SW.-W.
Stockholm, Swed. S. S.	New York	Gothenburg	58 02 N.	5 18 E.	19th	—, 20th	20th	29.12	ESE	SE., 8	SE	SE., 9	ESE.-SSE.
Caronia, Br. S. S.	London	New York	49 38 N.	20 10 W.	21st	4 p., 21st	22d	29.24	W	W., 9	NW	—, 10	SSE.-W.-NNW.
Nubian, Br. S. S.	Liverpool	Philadelphia	50 39 N.	20 14 W.	21st	Mid., 21st	22d	28.94	SSE	WNW., 10	NNW	—, 12	WSW.-W.-WNW.
Vittorio Emanuele III, Am. S. S.	Ireland	Baltimore	52 37 N.	35 29 W.	21st	4 p., 21st	23d	29.35	NW	NW	SW	NW., 9	WNW.-SW.
Hoosac, Br. S. S.	Norfolk	Liverpool	51 36 N.	17 45 W.	21st	4 a., 22d	23d	29.09	SE	NW., 10	NW	NW., 11	SW.-W.-NW.
Persephone, Danz. M. S.	Hamburg	Sabine	49 30 N.	7 00 W.	22d	5 p., 22d	22d	29.06	SW	SW., 10	NW	SW., 10	SSE.-S.-W.
Aral, Br. S. S.	Leith	New York	55 03 N.	31 00 W.	23d	8 p., 23d	24th	29.36	SSE	S., 8	W	—, 9	SSE.-S.-W.
De Grasse, Fr. S. S.	Havre	do	44 46 N.	56 20 W.	25th	11 p., 25th	26th	29.72	SW	NW., 5	NW	NNW., 9	SW.-NW.
Nubian, Br. S. S.	Liverpool	Philadelphia	46 07 N.	41 42 W.	26th	Noon, 26th	26th	29.74	SW	SW., 9	W	—, 9	SW.-W.
Winnebago, Br. S. S.	London	Brunswick, Ga.	50 12 N.	44 10 W.	28th	4 a., 29th	29th	29.68	SW	SW., 9	WSW	SW., 9	SW.-WSW.
Casper, Am. S. S.	Copenhagen	Norfolk	54 25 N.	35 00 W.	28th	2 p., 29th	30th	29.73	SW	SW., 9	W	SW., 9	SW.-NW.-W.
NORTH PACIFIC OCEAN													
Boren, Swed. S. S.	Philippine Islands	San Francisco	17 23 N.	135 32 E.	Aug. 31	5 p., 1st	Sept. 2	29.12	N	S., 10	S	S., 10	N.-W.-S.
Steelmaker, Am. S. S.	Honolulu	Iloilo, P. I.	18 14 N.	144 15 E.	1st	4 p., 1st	4th	29.55	SSE	SSW	SW	SW., 7	S.-SW.
Salina, Am. S. S.	Los Angeles	Manila	22 03 N.	133 28 E.	2d	4 p., 4th	4th	29.45	SSE	S., 7	S	S., 8	SSE.-S.
Teucer, Br. S. S.	Japan	Hankow	31 24 N.	129 00 E.	5th	6 p., 6th	7th	29.40	ESE	S., 11	W	S., 11	S.-W.
President Hayes, Am. S. S.	San Francisco	Kobe	33 28 N.	128 50 E.	6th	2 a., 7th	7th	28.84	SE	SSE., 12	WNW	SE., 12	SE.-S.-SW.
M. H. Whittier, Am. S. S.	Iquique	San Pedro	See text.	—	8th	—	9th	29.75	SW	—	SW	SW., 12	—
Do	do	do	See text.	—	12th	6 a., 14th	14th	29.44	SW	SW., 11	SW	SW., 11	—
Edgemoor, Am. S. S.	San Francisco	Balboa	8 05 N.	85 15 W.	13th	10 p., 13th	14th	29.54	ENE	ENE., 8	SE	ENE., 8	ENE.-ESE.
Betterton, Am. S. S.	do	Iquique	16 09 N.	105 30 W.	14th	5 a.	14th	29.51	—	—	—	—	—
China Arrow, Am. S. S.	Shanghai	San Francisco	40 38 N.	125 00 W.	12th	10th	16th	29.53	NNW	SE., 8	SE	SE., 8	SE.-SSW.
Waltemata, Br. S. S.	Auckland	Vancouver	44 07 N.	130 18 W.	15th	8 a., 16th	16th	29.27	WNW	NW	NNE	NW., 9	WNW.-NW.
Java Arrow, Am. S. S.	San Pedro	Woodsong	31 07 N.	124 40 W.	16th	8 a., 17th	17th	29.71	SE	N., 8	N	NE., 9	NE.-NW.
Havre Maru, Jap. S. S.	Yokohama	San Francisco	41 40 N.	132 50 W.	16th	1 a., 17th	17th	29.71	NW	NNW., 9	NNW	NNW., 9	Steady.
Pioneer, U. S. S.	Cruising in Alaskan waters.	—	54 57 N.	162 25 W.	17th	6 a., 19th	21st	29.08	E	S., 1	NW	NW., 10	SE.-S.
West Nomentum, Am. S. S.	Japan	San Francisco	49 00 N.	168 00 E.	18th	Mid. 18th	19th	29.50	N	NNW., 9	NNW	NNW., 9	Steady.
West Jessup, Am. S. S.	Portland	Yokohama	50 00 N.	172 40 E.	18th	8 p., 18th	19th	29.04	NNW	NW	NNW	NNW., 10	NW.-N.
Africa Maru, Jap. S. S.	Yokohama	Victoria	41 15 N.	153 00 E.	18th	4 a., 19th	20th	29.97	ENE	ESE., 8	SSE	SE., 8	E.-SE.
West Sequana, Am. S. S.	Manila	San Francisco	41 15 N.	167 35 E.	28th	4 a., 29th	30th	29.46	W	W., 8	W	W., 8	Steady.
West Jens, Am. S. S.	Kobe	Portland	31 48 N.	138 00 E.	29th	11 p., 30th	Oct. 1	29.13	E	S., 12	WNW	S., 12	SE.-S.-SW.
SOUTH PACIFIC OCEAN													
Eastern Moon, Am. S. S.	Panama	Sydney, Australia.	31 20 S.	171 50 E.	Aug. 31	3 p., 1st	Sept. 1	29.35	NNW	W., 7	SSE	NW., 9	NW.-SW.
SOUTH ATLANTIC OCEAN													
Nairnbank, Br. S. S.	Texas	Cape Town	33 54 S.	17 45 E.	9th	4 p.	9th	29.88	NW	NW., 9	NW	NW., 9	Steady.
Lorraine Cross, Am. S. S.	Buenos Aires	New Orleans	29 56 S.	48 16 W.	22d	22d	23d	29.88	NE	NE., 8	WNW	NW., 8	NE.-N.

¹ Reading uncorrected.² Regular observation only.

NORTH PACIFIC OCEAN

By WILLIS EDWIN HURD

A considerable change from the general atmospheric sluggishness of August occurred during September. The great anticyclone of the eastern Pacific, which had persisted for several months with very little disintegration, continued to be fairly well established, though its average pressure was lower than normal. However, cyclonic activities without, and incipient depressions within, its

area indicated that brisker and more unstable conditions were in operation.

In higher latitudes several active cyclones moved eastward over the Aleutians, the adjoining waters, and Alaska. They occurred principally during the second decade, and lacked the fluctuating characteristics of the average Low of the region. For the month the pressure over this portion of the sea was considerably above the normal.

Cyclones formed and moved more freely over middle and higher latitudes, and thus gales became more fre-

quent, and the surface air greatly cleared. Consequently fog decreased rapidly from August along the steamship routes, but increased in Alaskan waters, where reports indicate a far greater prevalence than usual. Fog continued relatively frequent along our western coast.

The following table shows the atmospheric pressures for several island and coast stations for September. It will be observed that a rather abnormal gradient existed between Juneau, with a plus pressure departure of 0.17 inch, and Tatoosh Island, with a minus departure of 0.03 inch.

Station	Average pressure	Departure from normal	Highest	Date	Lowest	Date
Dutch Harbor ¹	(²)	(²)	(²)	(²)	(²)	(²)
St. Paul ¹	29.84	+0.14	30.26	8th.	28.98	18th
Kodiak ¹	29.97	+0.27	30.42	24th	29.18	20th
Midway Island ¹	29.96	-0.11	30.08	18th	29.82	9th
Honolulu ¹	29.97	-0.08	30.07	16th	29.84	9th
Juneau ¹	30.07	+0.17	30.38	28th	29.60	14th
Tatoosh Island ¹	29.98	-0.03	30.19	30th	29.49	16th
San Francisco ¹	29.93	-0.01	30.21	29th	29.76	16th
San Diego ¹	29.88	0.00	30.04	7th	29.71	14th

¹ P. m. observations only.

² Data insufficient.

³ 25 days.

⁴ And other dates.

⁵ 26 days.

⁶ 27 days.

⁷ A. m. and p. m. observations.

⁸ Corrected to 24-hour mean.

East winds continued to prevail at Honolulu, and kona winds occurred infrequently. The average velocity was 8.8 miles per hour; the maximum velocity, 30 miles NE. on the 29th. Rainfall continued to be less than the normal.

Tropical cyclones in both east and west longitudes were moderately frequent and of dangerous strength. The following article by the Rev. José Coronas, S. J., of the Manila Observatory, describes the movements of such typhoons as occurred in the Far East up to and including September 18. In addition to the steamers mentioned in that report as being heavily involved in the typhoon south of Korea on the 6th, a special report from the British steamer *Teucer* shows that this vessel experienced considerable difficulty in crossing the Yellow Sea from western Japan to the Yangtse River. The captain intended sailing along the northern edge of the storm on the 5th and thus cut ahead of the approaching center, favored by the fresh easterly winds. In the evening, however, he decided this could not be done, and the *Teucer* was headed S. 15° E. at 10 p. m. Throughout the 6th she steamed against the generally southerly winds, encountering gales of force 11, but escaping the storm center. At midnight of the 6th she was able to resume her course in winds that were rapidly hauling to SW. Press reports indicate considerable damage to life and property in Korea resulting from this storm.

A further press report speaks of an intense storm, accompanied by "the worst floods Japan has experienced in 50 years," which swept the Empire, especially the central districts, during the night of the 30th. Our maps show a considerable depression nearing southern Japan on the morning of the 30th, and near Tokyo 24 hours later. From the 28th to the 30th the American steamer *West Jena*, from Kobe, experienced the strong to hurricane winds of this typhoon, which delayed her within the area bounded by 31° to 34° N., 135° to 138° E. for more than 48 hours.

From the American Tropics come various reports of severe storms this month. On the 8th and 9th the American steamer *Mericos H. Whittier*, Iquique to San Pedro,

encountered a SSW. to SW. storm of exceptional violence for the region so far south, the vessel being in 4° 23' N., 92° 13' W. at 6 a. m. of the 8th. During that day heavy rain squalls, with winds sometimes attaining force 12, were experienced. The gales continued until the 9th, generally from the SW., lowest given pressure, 29.75 (uncorrected), at 6 a. m. of the 9th.

The *Mericos H. Whittier* again encountered SW. gales on the 12th. These continued until the afternoon of the 14th, but rose to force 11 at 4 p. m. of the 13th, pressure falling to 29.44 (uncorrected), at 6 a. m. of the 14th. Unfortunately the vessel did not record its positions during this storm, but from the dates given, taken in conjunction with its earlier and subsequent known positions, it must have experienced the same cyclone that was encountered by the American steamer *Betterton*, on the 14th, in 16° 09' N., 105° 30' W. The disturbance reported by the American steamer *Edgemoor* on the 13th, in 8° 05' N., 85° 15' W. (see table), seems hardly to have been identical with the previously mentioned storm of the same date, though further information may connect the two.

A shipping report from the American steamer *West Calera*, which left San Pedro on the 21st, bound for Sydney, Australia, states that this vessel, when 1,832 miles from the sailing port, on the 29th, encountered a severe hurricane. No further data concerning the storm are available at this writing.

Waterspout.—American steamer *Enterprise*, San Francisco toward Hilo: "September 13, 1925. In 35° 18' N., 128° 03' W., at 5.58 p. m., passed waterspout about 40 feet high traveling NE. 20 miles per hour."

DUST OVER INDIAN OCEAN

Reports of dust at sea come from the following vessels: American steamer *Egremont*, 13° 32' N., 43° E. (southern part of Red Sea); 7th: "Thick sand." American steamer *President Harrison*: "9th, at 9 p. m. When passing Aden 10 miles distant encountered a slight sandstorm, or at least for 30 minutes in cloud of dust. Very little breeze from off shore."—*W. E. H.*

THREE WELL-DEVELOPED TYPHOONS IN THE FAR EAST DURING SEPTEMBER 1 TO 18

By REV. JOSÉ CORONAS, S. J.

[Weather Bureau, Manila, P. I.]

Our weather maps showed three well-developed typhoons in the Far East during the first half of the month. At the time we are writing this (Sept. 25) there is another big typhoon over 300 miles to the east of central Luzon moving WNW. The U. S. Army transport *Thomas* and the U. S. Navy transport *Chaumont* are well under the influence of this typhoon in their way from Guam to Manila. Details concerning this typhoon will be given in our article for next month.

The first typhoon of this month of September had formed already on August 27 to 28 over the western Carolines to the south of Guam, near 145° longitude E. and 10° latitude N. It moved first NNW. and almost north until the early morning of the 30th, passing near Guam to the west in the evening of the 29th. The barometric minimum observed there was 740 mm. (29.13 inches) at 7 p. m., a gale blowing from the E. and SE. quadrants.

On the 30th and 31st of August the typhoon moved WNW. and W. by N., but on September 1 it inclined again northward, keeping a NW. and NNW. direction